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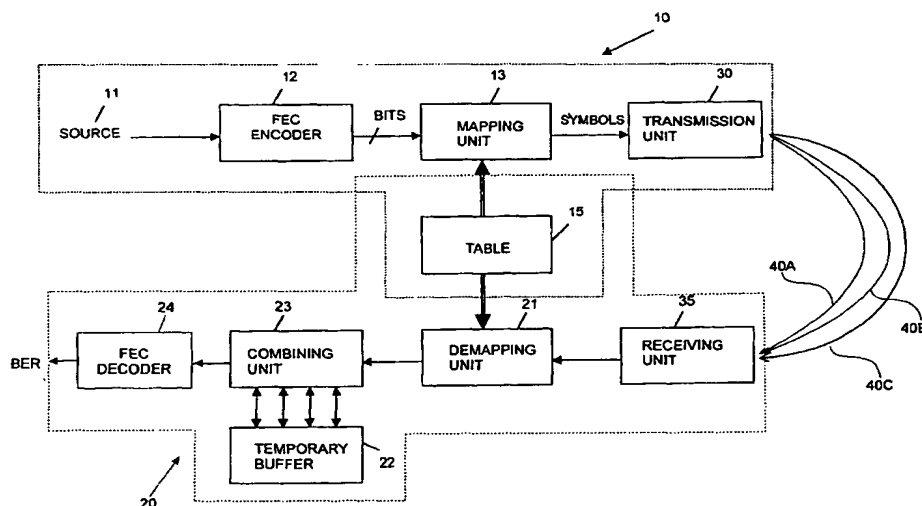
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(54) Title: **CONSTELLATION REARRANGEMENT FOR ARQ TRANSMIT DIVERSITY SCHEMES**



(57) Abstract: An ARQ (re-) transmission method of transmitting data in a wireless communication system wherein data packets are transmitted from a transmitter to a receiver, using a first transmission and a second transmission based on a repeat request. The method comprises the steps of modulating data at the transmitter using a first signal constellation pattern to obtain a first data symbol. The first data symbol is transmitted as the first transmission to the receiver using a first diversity branch. Further, the data is modulated at the transmitter using a second signal constellation pattern to obtain a second data symbol. Then, the second data symbol is transmitted as the second transmission to the receive over a second diversity branch. Finally, the received first and second data symbol data symbol are diversity combined at the receiver. The invention further relates to a transmitter and a receiver embodied to carry out the method of the invention.

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